

Date: Mon, 29 Nov 93 04:30:23 PST  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V93 #127  
To: Ham-Ant

Ham-Ant Digest                    Mon, 29 Nov 93                    Volume 93 : Issue 127

Today's Topics:

    5/8 wave 2m base antennas  
    Balanced feed lightning protection?  
    Ground rod "experiment". What does it all mean?  
        random wire antennas revisited..  
    Rugged 2 meter antenna.  
    Skywire Antenna  
    WANTED: Webster Band-Spanner

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 22 Nov 1993 22:35:47 GMT  
From: organpipe.uug.arizona.edu!helium!hlester@uunet.uu.net  
Subject: 5/8 wave 2m base antennas  
To: ham-ant@ucsd.edu

All right, you antenna genii, solve this:  
Now, a 5/8 wave antenna for 2m might be considered a standard for mobile  
use. Drill a hole in the roof, stick your little mount into the hole,  
screw on your basic Larsen, run coax to the rig and you're all set.  
But try to sit your Larsen atop a metal plate, to which are attached 4 radials,  
and everyone goes bananas with various "de-coupling" schemes. Why is the  
de-coupling issue not addressed in mobile installations, but it's a big  
deal for a base station?.

I will not put a 10' antenna on my roof, for neighborhood visibility purposes,  
so I limit myself to a 4 or 5' radiator length. I already have installed a

1/4 wave ground plane that I made for \$1.79 (an S0-239), and it works well, but I want something better - something that'll squish the radiation pattern down. Don't talk to me about J's, thank you. Just answer the question. ;-)

Howard KE7QJ

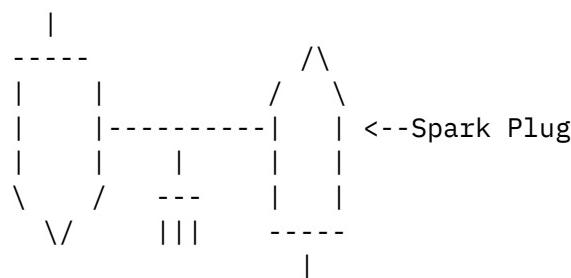
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Date: Sat, 27 Nov 93 21:57:34 GMT  
From: swrindle!gatech!news-feed-2.peachnet.edu!umn.edu!mmm.mmm.com!mmc.mmmg.com!  
horta!RYAN@network.ucsd.edu  
Subject: Balanced feed lightning protection?  
To: ham-ant@ucsd.edu

In article <mbuttsCH5rJG.Myo@netcom.com>, mbutts@netcom.com (Mike Butts) writes:  
>What is a good way to provide lightning protection  
>to a balanced feedline coming into the shack?  
>  
I've used a rather "crude" method to provide a certain measure of lighting protection on several open wire feed systems. The method is good for keeping the larger charges out of the shack, but certainly would not protect a solid-state front end. (although I very much doubt that I would want to trust any protection device to save all those nice FETs, etc.)

The simple device is made from two automotive spark plugs screwed into a suitably grounded piece of metal (I have used copper and aluminum). The open wire feed is connected to the top of each spark plug and the plugs are gapped to as small a gap as will not arc over when you are transmitting. Such a set-up would look something like this:

Feedline



Feedline

I was very skeptical about this, having read it in some old time hobbyist magazine, but happened to be near the apparatus once during a dry period when the wind was blowing. I heard the sound of arcing, and, upon some exploring found that it was the plugs that were arcing. I guess they were doing what I had installed them for.

Hope this is of some help

73 de WA0DCJ

#  
# Jerry D. Ryan jdryan@mmm.com - e-mail #  
# 3M (612) 733-3595 - voice #  
# Technical Computations (612) 733-0648 - fax #  
# 3M Center - Bldg. 201-2E-18 All opinions expressed are mine alone and #  
# St. Paul, MN 55144-1000 do not necessarily represent those of 3M. #  
#  
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Date: 26 Nov 93 09:36:26 GMT

From: noc.near.net!news.delphi.com!BIX.com!arog@uunet.uu.net  
Subject: Ground rod "experiment". What does it all mean?  
To: ham-ant@ucsd.edu

rossi@VFL.Paramax.COM (Pete Rossi) writes:

(stuff deleted)

>floor. My house is about 40 years old so I am reasonably certain that the  
>entire water service is metallic, i.e no PVC. I am wondering what will  
>happen by directly connecting the two grounds together?

DON'T. There is enough difference in the electro-chemical series  
between the copper and the iron (and whatever zinc that is left)  
to do major damage to the water pipes in the ground. Making  
that connection means that you have an earth battery that is  
shorted and, in general, I'd expect the water pipe to loose.

-----  
Alan, the retired building inspector, w6spk  
arog@BIX.com  
moderator of ham.radio at BIX.

-----  
Date: Thu, 25 Nov 1993 23:10:18 -0500  
From: noc.near.net!das-news.harvard.edu!spdcc!merk!harvee.billerica.ma.us!  
esj@uunet.uu.net  
Subject: random wire antennas revisited..  
To: ham-ant@ucsd.edu

if I remember correctly, someone posted some interesting info about random length wire antennas here recently. Being too hassled at the time, I didn't save it for later reading and of course, I need the info now...

I'm elmering a newbie no-code-becoming-code (we're building the same 80m qrp rig) and his QTH has a bunch of restrictions mostly due to parents and budget. I'm thinking that a random wire antenna built out of magnet wire might be the best way to go till his parents get accustomed to the idea of trees as antenna supports and my newbie ham saves enough money to buy a tuner that can handle balanced feeds. :-)

If someone could send me a copy of that posting, I'd appreciate it.

Thanks

--- eric

--  
HOME: esj@harvee.billerica.ma.us HAM ka1eec  
WORK: 617.630.4687 (w) esj@ruby.polaroid.com  
source of the public's fear of the unknown since 1956

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Date: Thu, 25 Nov 1993 23:02:42 -0500  
From: noc.near.net!das-news.harvard.edu!spdcc!merk!harvee.billerica.ma.us!  
esj@uunet.uu.net  
Subject: Rugged 2 meter antenna.  
To: ham-ant@ucsd.edu

In <1993Nov25.015407.25336@mnemosyne.cs.du.edu>, Mr. Nice Guy writes:  
>In article <CGyHL3.8o2@cyberspace.org>, Klaus <n8nxf@cyberspace.org> wrote:  
>>  
>>I want to build a simple, rugged and efficient antenna to mount on  
>>my bicycles and kayak. I often help out with triathelons, mountain  
>>bike events, etc. I don't like sitting in a car, preferring to be  
>>mobile on the course. I need an antenna that can be whacked by  
>>trees and still preform well in hilly terrain. It seems to me that  
>>a J would be the best choice.  
>  
>I decided that a Larsen 1/2 wave antenna was the way to go on my  
>recumbant bicycle. It doesn't need radials and it is strong, light and  
>weatherproof.

Ah, another recumbent rider! I use a 1/2 wave antenna made from an old aea hot rod antenna that I snapped the whip off of. I attached a 40" piece of wire to the hot rod loading coil, taped the beast to my 6'

"safety" flag, pruned the wire for min swr at 146mhz, mounted it on the bike and off I go!

also, after a couple of rides, I decided that a speaker mike was an unsafe way to operate so now I use a boom mike and headset (one ear) with a PTT switch on the handlebar. only way to go!

--- eric

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HOME: esj@harvee.billerica.ma.us HAM ka1eec  
WORK: 617.630.4687 (w) esj@ruby.polaroid.com  
source of the public's fear of the unknown since 1956

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Date: 28 Nov 93 20:32:07 GMT  
From: ogicse!emory!europa.eng.gtefsd.com!library.ucla.edu!agate!iat.holonet.net!  
rohrwerk@network.ucsd.edu  
Subject: Skywire Antenna  
To: ham-ant@ucsd.edu

josh@sol.asl.hitachi.com (Joshua Koslov) writes:

>Anyone have any experience with the "loop skywire" antenna? For those >unfamiliar, it is a horizontally-oriented loop antenna, one wavelength at >fundamental, which is resonant on all (not just odd) harmonics.

I have one cut approximately for 80 meters -- don't know if it's really horizontal, but kind of a tilted triangular loop... as good or better an antenna made out of wire for general use I can't think of.

However, forget resonance. Forget coax. Use balanced ladder line and a balanced tuner. You won't regret it.

And forget about any material you may have read about radiation patterns going straight up. This is more true for the lower frequencies it's cut for, but not very true at all for the higher bands. In any case, you can work your share of DX with it -- within the limitations of a general purpose, omnidirectional antenna.

You get lot lower electrical noise pickup, too.

John, K0JD

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Date: Sat, 27 Nov 1993 05:24:05 GMT  
From: netcomsv!netcom.com!fmitch@decwrl.dec.com

Subject: WANTED: Webster Band-Spanner  
To: ham-ant@ucsd.edu

hi, mitch wa4osr here in mobile, alabama...

i am looking for a webster bandspanner mobile antenna... if you have one  
you would like to get rid of please email me or call me at below numbers...

thanks,  
mitch, wa4osr  
fmitch@netcom.com

--

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fmitch@netcom.com  
Felton "Mitch" Mitchell, WA40SR in Mobile, Alabama USA  
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX  
co-sysop for W4IAK bbs running fbb ... sysop for WA40SR DXCluster in Mobile..

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Date: Sun, 28 Nov 1993 23:40:27 GMT  
From: swrinde!gatech!howland.reston.ans.net!vixen.cso.uiuc.edu!moe.ksu.ksu.edu!  
hobbes.physics.uiowa.edu!news.uiowa.edu!icaen!drenze@network.ucsd.edu  
To: ham-ant@ucsd.edu

References <931122144415.21808384@engvax.picker.com>,  
<H.eg.FmBZHTsKgbY@harvee.billerica.ma.us>, <CH5wEC.GyK@herald.indirect.com>ew  
Subject : Re: random wire antennas revisited..

kg7bk@indirect.com (Cecil Moore) writes:

>Eric S Johansson (esj@harvee.billerica.ma.us) wrote:  
> I'm thinking that a random wire antenna built out of  
> magnet wire might be the best way to go till his parents get accustomed  
> Thanks --- eric

>Hope his rig has a tunable output stage, like pi or Z-match. If it is 50  
>ohms fixed, then it won't work well into a random wire without an antenna  
>tuner.

As long as you're homebrewing, homebrew an L-matching network for the  
antenna tuner.

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-- /| | Doug Renze, N0YVW |  
\'o.O' | +1 319 337 4664 | If you can read this you're too close.

=(\_ \_)= | drenze@icaen.uiowa.edu |  
U | Douglas-Renze@uiowa.edu |

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End of Ham-Ant Digest V93 #127

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